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(71) Applicant (for all designated States except US): **COMPAGNIE GENERALE DE GEOPHYSIQUE [FR/FR];**
1, rue Louis Migaux, F-91300 Massy (FR).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **SILIQI, Risto**
[FR/FR]; 29, rue Saint-André des Arts, F-75006 Paris (FR).

(74) Agents: **CALLON DE LAMARCK, Jean-Robert et al.;**
Cabinet Régimbeau, 20, rue de Chazelles, F-75847 Paris
Cédex 17 (FR).

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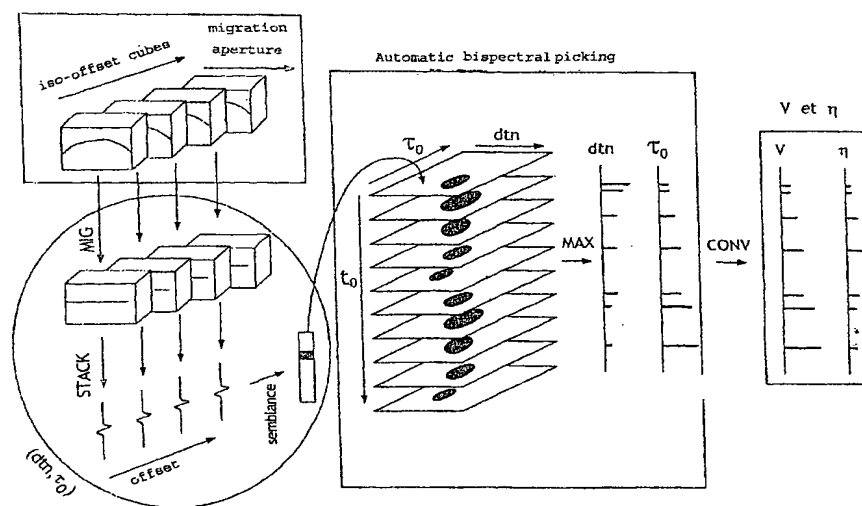
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(54) Title: METHOD FOR BISPECTRAL PICKING OF ANELLIPTICAL NMO CORRECTION PARAMETERS



(57) Abstract: Method of determining the velocity V and anellipticity η parameters for processing seismic traces in a common midpoint (CMP) gather comprising: - a preliminary step to define a plurality of nodes (dtn, τ_0) - for each node (dtn, τ_0) defined in the preliminary step, the following steps: - for static NMO correction of traces in the CMP gather as a function of the values of the said parameters dtn and τ_0 at the node considered, and calculation of the semblance function associated with the said NMO correction for the node considered; and - for each picked time t_0 , a step including determination of the maximum semblance node ($dtn(t_0), \tau_0(t_0)$) - and a final step to convert the $dtn(t_0)$ and $\tau_0(t_0)$ parameters, so as to obtain the velocity (t_0) and anellipticity $\eta(t_0)$ laws.